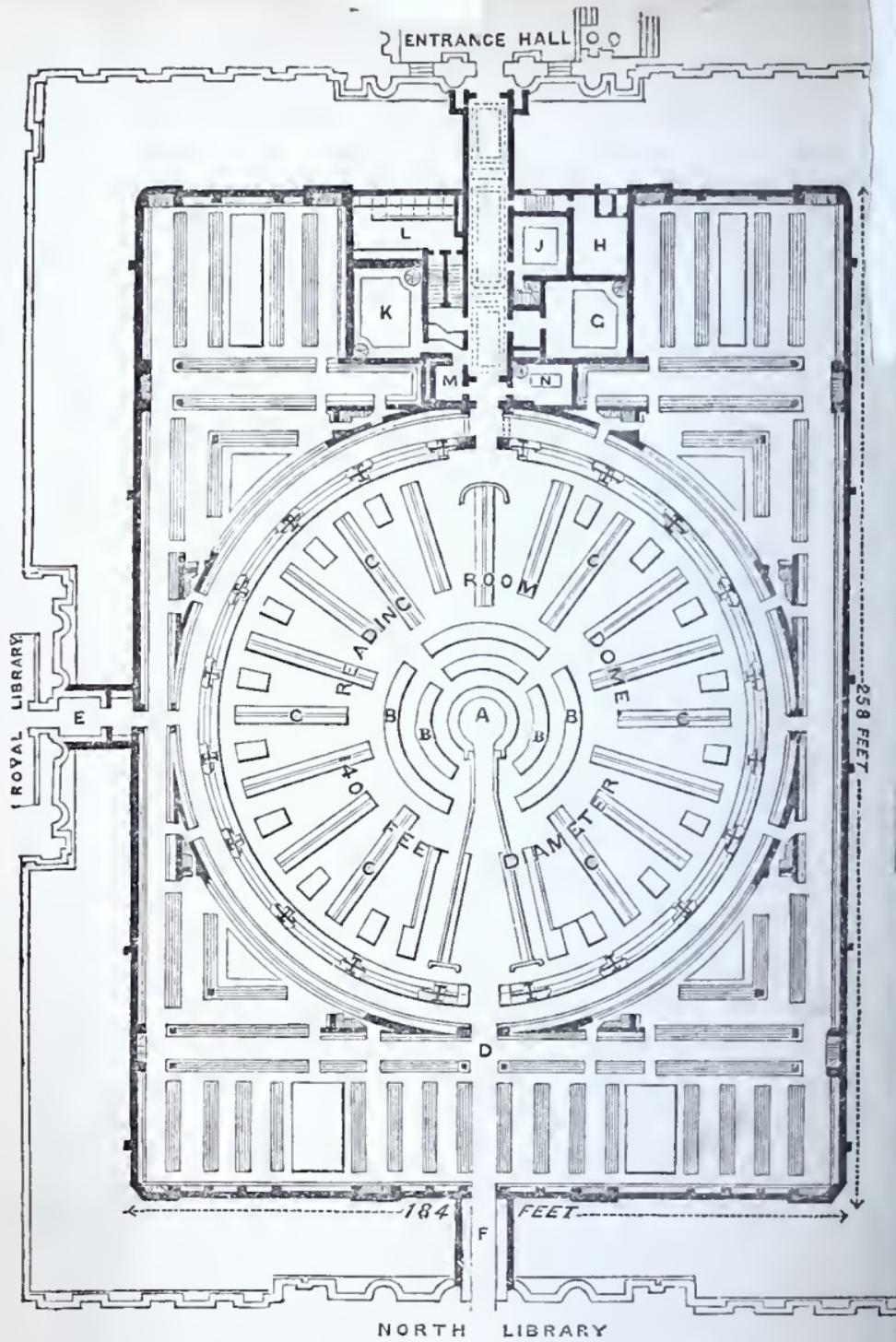


B R I T I S H M U S E U M.

NEW READING-ROOM.

Price One Penny.



BRITISH MUSEUM.

NEW READING-ROOM

AND

LIBRARIES.

WITH A PLAN.

LONDON:

JOHN MURRAY, ALBEMARLE STREET.

1857.

CONTENTS.

	PAGE
INCREASE OF THE LIBRARY	5
ORIGIN OF NEW READING-ROOM AND LIBRARIES	7
CONSTRUCTION OF NEW READING-ROOM AND LIBRARIES	9
DECORATION, &c. OF NEW READING-ROOM	13
ARRANGEMENTS OF NEW READING-ROOM	14

BRITISH MUSEUM.

NEW READING-ROOM AND LIBRARIES.

THE new Reading-Room and Libraries of the British Museum are now completed. *The Times*, in a leading article on the 7th of May last year, contained a general description of the building then in progress, and we gladly avail ourselves of the permission liberally granted by that Journal to extract from its pages the substance of another article which appeared on the 21st of April last, containing concise but very accurate details of the construction as it exists in its state of completeness.

" Its site, in the internal quadrangle of the Museum, has concealed its progress from the public eye, although the lofty and capacious edifice occupies an area of 48,000 superficial feet. This site was indeed its proper and only situation, from the obvious necessity of the new Reading-room being adjacent to the vast magazines of books and manuscripts contained in the various apartments of the Museum.

INCREASE OF THE LIBRARY.

" The present number of volumes in our great public library is upwards of half a million; but even that large figure does not represent the far larger collection of separate and distinct articles—in tracts, pamphlets, and manuscripts. They are legion, and not yet accurately catalogued or com-

puted. Probably, the enormous quantity of pamphlets, political, theological, and scientific, of Great Britain, since the Reformation, constitute the British Museum Library one of the largest collections of printed literature in the world. Maps also form a relatively considerable portion. The rate of increase is enormous. In the Parliamentary return for the year ending the 24th of December, 1856, not yet published, it will appear that the last annual additions number 10,434 volumes, including music, maps, and newspapers, of which 753 were presented, 4010 purchased, and 5831 acquired by home copyright. The number of parts of volumes was 27,516. In addition, the Library had accumulated numerous maps, charts, and plans, variously obtained. The number of pieces of music alone added was 2347. In gross, the total additional articles that year numbered 42,639. Of the complete works accumulated in the twelve months, 1901 were presented, 2005 purchased, and 7933 were acquired under the Copyright Acts. In the same year, also, each article being impressed with the Museum stamp, the number used was 162,940!

"The number of books returned to the shelves of the General Library was 110,873; to those of the Royal Library, 8869; to those of the Grenville Library, 1018; to the closets in which books are kept from day to day for the use of the readers, 79,598; making a total of 200,358, or 684 per diem. Adding the number of volumes returned to the shelves of the Reading-rooms, about 144,000, the whole amounts to 344,358, or 1175 per diem. The number of readers within that year was 53,209, or an average of 181 per diem, the Reading-rooms having been kept open 293 days. Each reader had, therefore, consulted on an average $6\frac{1}{2}$ volumes per diem.

"Thus had the Library outgrown its local habitation since its foundation in 1753, when the first contents of 'Montagu House,' Bloomsbury, consisted of the Sloane Collection, including only a few books, the Harleian MSS., and the Cottonian Library; Parliament providing no money, but by Act authorising the provision of 30,000*l.* by a *Lottery!* The old

mansion continued perfectly sufficient for the whole miscellaneous contents of the Museum until a few new rooms were added for the Egyptian antiquities obtained in 1801, and for the Townley Marbles. In 1823 the present entirely new building, designed by Sir Robert Smirke, became necessary. Montagu House was finally levelled with the ground in 1845, the new portico being only finished April 19, 1847. It is worthy of record that in the month of July, 1759, only five readers attended the public reading-room.

ORIGIN OF NEW READING-ROOM AND LIBRARIES.

"The utter insufficiency of the institution for book room and accommodation for readers existed during the last four Parliaments, and without a remedy. The public, the trustees, men of letters in the Legislature, in vain devised various plans, and demanded pecuniary aid from the Commons. Select committee reports and annual returns followed in succession. It is sufficient now to refer our readers to the two volumes of reports in 1835 and 1836, and to the various Parliamentary returns asked for since 1850; to similar Parliamentary volumes on Public Libraries in 1849 and 1850; and, lastly, to the effective Report of the Royal Commission (with 800 appended folio pages of evidence) appointed to inquire into the constitution and government of the Museum. The practical result was an unanimous representation of the Commissioners that 'the subject of additions to the Museum was one which must evidently, at no distant period, engage the attention of Her Majesty's Government.' Mr. Hume, fortunately, was an active member of the Commission, and concurred from honest conviction in the necessity of an early and munificent grant of public money. The Royal Commissioners, reporting the inadequacy of book-room, the injury to the valuable contents of the library by the existing reading-room arrangements, the slave-labour of the attendants, and the bad accommodation of the readers, stated that 'these circumstances have suggested to Mr. Panizzi a scheme of extension by which the buildings to be constructed would

consist of new MSS. rooms and a new enlarged reading-room, which would enable the trustees to devote the present MSS. rooms, including that at present made over to the Grenville Library, to the printed books.' This report lay dormant almost for four years. 'Questions' were constantly asked in the House of Commons as to the intentions of the Ministers of the day. The ordinary annual vote was now and then opposed by individual members, on the ground of the indecision or indifference of the Government to the recommendations of the Commission. Actually the trustees asked no more than half of the sum which they conceived desirable for the purchase of books, assigning the true reason, that the Library would be inadequate for the reception of increased contents. Matters thus continued *in statu quo*. In the meantime the difficulty of finding room for the current accessions to the Library became daily greater.

"The plan alluded to by the Commissioners had to be abandoned on the ground of expense and delay. As a last resort, Mr. Panizzi proposed to the trustees that a building should be erected in the inner quadrangle of the Museum. By this scheme the cost of purchase would be avoided. This proposal was accompanied by drawings showing the ground-plan, and a general detail of the manner in which it was suggested that the interior arrangements for the accommodation of the readers and of books should be framed. The architect of the trustees, Mr. Sydney Smirke, reported favourably on this plan; and the result is a building, than which none are better, few perhaps so thoroughly, adapted to the purposes for which it is intended. On a 'Supply night,' the 3rd of July, 1854, Parliament, by its last evening vote, on the 'miscellaneous estimates,' granted 55,225*l.* for the 'British Museum establishment,' towards its ordinary expenditure, and 101,142*l.* for 'new buildings and fittings.' In this latter gross estimate there was an item of 61,000*l.* on account 'for the erection of a building within the interior quadrangle, for the purpose of affording increased accommodation.' The first grant was not half enough, as will soon

be seen; still it was a beginning, and laid the foundation. Within three years the vast structnre has been completed, at the cost of 150,000*l.*, or about that sum when all contingent expenses are accounted for.

CONSTRUCTION OF NEW READING-ROOM AND LIBRARIES.

"The Reading-room is circnar. The entire building does not occupy the whole quadrangle, there being a clear interval of from 27 to 30 feet all round, to give light and air to the surrounding buildings, and as a guard against possible destruction by fire from the outer parts of the Museum. The dome of this Reading-room is 140 feet in diameter, its height being 106 feet. In this dimension of diameter it is only inferior to the Pantheon of Rome by 2 feet; St. Peter's being only 139; Sta. Maria in Florence, 139; the tomb of Mahomet, Bejapore, 135; St. Paul's, 112; St. Sophia, Constantinople, 107, and the Church at Darmstadt, 105. The new Reading-room contains 1,250,000 cubic feet of space; its 'snburbs,' or snrronnding libraries, 750,000. The bnilding is constructed principally of iron, with brick arches between the main ribs, supported by 20 iron piers, having a sectional area of 10 snperficial feet to each, including the brick casing, or 200 feet in all. This saving of space by the use of iron is remarkable, the piers of snpport on which our dome rests only thus occupying 200 feet, whereas the piers of the Pantheon of Rome fill 7477 feet of area, and those of the tomb of Mahomet 5593. Upwards of 2000 tons of iron have been employed in the construction. The weight of the materials used in the dome is about 4200 tons—viz. up-wards of 200 tons on each pier. The first standard was only fixed in January, 1855. The framework and scaffolding upon which the dome rested were removed on the 2nd of the following Jnne. No snbsidence or 'set' of material was observable on the wedges being removed. The entire dome was roofed in and copper covering laid in September, 1855. The roof is formed into two separate spherical and concentric air chambers, extending over the whole snrface; one

between the external covering and brick vaulting, the object being the equalization of temperature during extremes of heat and cold out of doors; the other chamber, between the brick vaulting and the internal visible surface, being intended to carry off the vitiated air from the Reading-room. This ventilation is effected through apertures in the soffites of the windows, and partly by others at the top of the dome; the bad air passing through outlets provided around the lantern. In order to obviate the effects of condensation, all the sky-lights, lanterns, and windows throughout the building are double. The quantity of glass used amounts to about 60,000 superficial feet. In order to guard against the consequences of an avalanche of snow falling from the dome on to the surrounding libraries, the building has been carried up outside perpendicular to such a height above the spring of the arch as to form a gallery nine feet in width, provided with proper outlets, by which the snow is intercepted.

"This Reading-room contains ample and comfortable accommodation for 300 readers. Each person will have allotted to him a space of 4 feet 3 inches long. He is screened from the opposite occupant by a longitudinal division, which is fitted with a hinged desk graduated on sloping racks, and a folding shelf for spare books. In the space between the two, which is recessed, an inkstand is fixed, having suitable penholders. Thus the whole table-top is free from writing implements or other embarrassments, and every precaution is taken to preserve the books if the readers will but use common care.

"The framework of each table is of iron, forming air-distributing channels, which are contrived so that the air may be delivered at the top of the longitudinal screen division, above the level of the heads of the readers, or, if desired, only at each end pedestal of the tables, all the outlets being under the control of valves. A tubular footrail also passes from end to end of each table, which may have a current of warm water through it at pleasure, and be used as a footwarmer if required.

"The Catalogue tables, with shelves under, and air-distributing tubes between, are ranged in two concentric circles around the central superintendent's enclosure or raised platform, the latter being fitted with tables, ticket-boxes, and with dwarf partitions surmounted by glass screens, dividing a passage leading to the surrounding libraries. The pedestals of the tables form tubes communicating with the air-chamber below, which is 6 feet high, and occupies the whole area of the Reading-room. It is fitted with hot-water pipes, arranged in radiating lines. The supply of fresh air is obtained from a shaft 60 feet high, built on the north side of the north wing about 300 feet distant, communicating with a tunnel or sub-way, which has branches or 'loop-lines' fitted with valves for diverting the current either wholly through the heating apparatus, or through the cold-air flues, or partly through either, as occasion may require. The air-channels are of sufficient capacity to admit a supply of fresh air for 500 persons at the rate of 10 cubic feet per minute, and at a velocity not exceeding 1·0 foot per second. For summer ventilation steam-pipes, placed at the summit of the roofs and dome, will be heated, and extract the foul air when the external and internal temperature is unfavourable for the purpose.

"The arrangement of the presses is throughout peculiar. It is calculated that the shelves within the Dome-room will contain 80,000 volumes. Two lifts are placed at convenient stations for the purpose of raising the books to the level of the several gallery floors. The bookcases are of novel and simple construction, the uprights or standards being formed of malleable iron galvanized and framed together, having fillets of beech inserted between the iron to receive the brass pins upon which the shelves rest. The framework of the book-cases forms the support for the iron perforated floors of the gallery avenues, and which are generally 8 feet wide, the central 6 feet being appropriated to the perforated floor, and the remainder being a clear space between the back of the books and the flooring, by which contrivance the light from the skylights (in all cases extending to the full width

of the avenues) is thrown down the back of the books on each story, so that the lettering may be easily discerned throughout the book ranges.

"The shelves are formed of iron galvanized plates, edged with wainscot and covered with russet hide leather, and having a book-fall attached. They are fitted at each end with galvanized iron leather covered, and wadded pads placed next the skeleton bookcase framing, to prevent injury to the binding when the books are taken out or replaced. Between these pads the skeleton framing of the cases forms an aperture by which a current of air may pass and ventilation be kept up throughout. The shelves rest upon brass pins, the holes for which are pierced at three-quarters of an inch apart from centre to centre; but by a contrivance in cranking the shaft of the pin, which may be turned upwards or downwards, this interval is practically halved, and the position of the shelves may be altered three-eighths of an inch at a time. There are 2,750,000 of these holes!

"In all cases, except against the external walls, the bookcases are double, the books being placed on both sides, a lattice of iron-work being fixed for their longitudinal separation. Thus, throughout the whole interior of the new building there are no walls, the division being in all cases formed of a double range of books, fore-edge to fore-edge. The only exception is at the shelving provided for newspapers, a single range of which necessarily occupies the space of two ranges of books. Three thousand superficial feet of cases are provided for newspapers.

"For convenience of access to the galleries, the staircases have been placed so that, throughout the building, they are within 40 feet of each other. The building contains 3 miles lineal of bookcases, 8 feet high; assuming them all to be spaced for the averaged octavo book size, the entire ranges form 25 miles of shelves. Assuming the shelves to be filled with books, of paper of average thickness, the leaves placed edge to edge would extend about 25,000 miles, or more than three times the diameter of the globe!"

"The cost, about 150,000*l.*, includes the fittings and furniture and the necessary shelves for immediate use.

DECORATION, &c. OF NEW READING-ROOM.

"In the decoration of the interior dome, light colours and the purest gilding have been preferred. The great room, therefore, has an illuminated and elegant aspect. The decorative work may be shortly described:—The inner surface of the dome is divided into twenty compartments by moulded ribs, which are gilded with leaf prepared from unalloyed gold, the soffites being in ornamental patterns, and the edges touching the adjoining margins fringed with a leaf-pattern scolloped edge. Each compartment contains a circular-headed window, 27 feet high and 12 feet wide, with three panels above, the central one being medallion-shaped, the whole bordered with gilt mouldings and lines, and the field of the panels finished in encaustic azure blue, the surrounding margins being of a warm cream-colour. The details of the windows are treated in like manner,—the spandril panels blue; the enriched column and pilaster caps, the central flowers, the border moulding and lines being all gilded; the margins cream-colour throughout. The moulded rim of the lantern light, which is painted and gilded to correspond, is 40 feet diameter. The sash is formed of gilt moulded ribs radiating from a central medallion, in which the Royal monogram is alternated with the Imperial Crown.

"The cornice, from which the dome springs, is massive and almost wholly gilded, the frieze being formed into panels bounded by lines terminating at the ends with a gilt fret ornament. Each compartment of the dome is marked by a bold enriched gilt console, which forms at once the support of the main rib and the base for a colossal marble statue, a series of which it is proposed to place on the cornice.

"Between the cornice and the floor the space is filled with the bookcases and galleries of access, the cornice, standards, and railings of which are wholly gilded, the panels of the soffites of the latter being blue, having gilded ornaments therein.

"The tables and enclosnres are of wainscot, the chairs of mahogany, the floors being covered with kamptnlcon.

"The main entrance into the new Reading-room is direct from the Great Hall, and there are secondary entrances for the officers from the King's Library and the Great Northern Library rooms, through which all books are conveyed to the centre of the Reading-room, whence they are distributed.

"The amalgamation of the several catalogues, which are drawn up on various plans, into one catalogue prepared on a uniform plan, is proceeding rapidly. Letters A, B, C, D, E, F constitute about one-third of the entire catalogue, and this portion, completed, will be placed in the new Reading-room on its opening ; it will be comprised in nearly 500 volumes. The completion of this Herculean work is now under the responsible superintendence of Mr. J. Winter Jones, the successor of Mr. Panizzi in the keepership of the department of printed books, Mr. Panizzi being now the Principal Librarian."

"The architect, Mr. Smirke, has the merit of the preparation of the original and first designs. The contractors, Messrs. Baker and Fielder, share no common deserts in their professional labours. Indeed the skill, perseverance, and ingenious resources of their managing partner, Mr. Fielder, have been beyond all praise. It is gratifying to record that such a vast and lofty building has been completed without loss of a single life or any serious accident." The warming and ventilating arrangements have been carried ont by Messrs. Hadon of Trowbridge.

ARRANGEMENTS OF NEW READING-ROOM.

We will now proceed to describe more at length the internal fittings and arrangements of the Reading-room, which will be better understood by reference to the plan which forms the frontispiece to this paper. A, on the plan, shows the circular enclosure occupied by the Superintendent, the Clerk, and the attendants. The Trustees, having succeeded in providing for the public a Reading-room superior

in its construction and appointments to all other buildings of the same class, have determined to afford the readers every possible facility in the prosecution of their various inquiries. With this view they have selected one of the superior officers of the Library, and placed the general management of the Reading-room in his hands. This officer is also charged with the special duty of assisting the readers in their researches ; and, from his central position in the Reading-room, will be readily accessible to all, and able to superintend the whole service. This gentleman, possessing a large store of miscellaneous information, an extensive acquaintance with the languages and literature of modern Europe, and an intimate knowledge of the contents of the Library, is eminently qualified to discharge the duties confided to him to the great advantage of the readers. It is anticipated that, by this arrangement, the Trustees will meet a want which has been long felt, and will infinitely increase the utility of the National Library to all who desire to consult it.

B indicates the catalogue-tables, which are arranged round the Superintendent's enclosure. In addition to the catalogues, these tables will be furnished with printed tickets, containing on one side the regulations to be observed by the readers in applying for and returning the manuscripts and printed books they desire to use, and on the other a form to be filled up with certain particulars relating to the works they send for.

C represents the tables. These are 35 in number; eight are 34 feet long, and accommodate 16 readers, 8 on each side; nine are 30 feet long, and accommodate 14 readers, 7 on each side; two are 30 feet long, and accommodate 8 readers each, viz. 7 on one side and 1 on the other; these two tables are set apart for the exclusive use of ladies; sixteen other tables are 6 feet long, and accommodate 2 readers each; these have no divisions between them, and are fitted up with rising desks of a large size for those readers who may have occasion to consult works beyond the usual dimensions.

E, F, D show the openings leading from the North Library and the King's Library to the New Reading-room. When readers have filled up their tickets they hand them to the attendants in the central enclosure, by whom they are passed to other attendants, whose duty it is to fetch the printed books or manuscripts from the shelves of the libraries. Through these openings, D, E, and F, the books are brought to the central enclosure, and thence conveyed by the Reading-room attendants to the readers ; the readers' tickets, filled up as above described, being then deposited in boxes constructed for the purpose within the superintendent's enclosure, and retained until the books they respectively describe have been returned by the readers, when the tickets are given up.

The book-presses under the gallery are filled with a large library of reference for the use of the readers, comprising most of the standard works on the various branches of learning, and an extensive collection of dictionaries of all languages, biographical works, encyclopædias, parliamentary histories, topographical works, &c. &c. These books, which are about 20,000 in number, the readers can consult at pleasure without filling up tickets for them.

On each side of the passage from the Entrance Hall, through which the readers enter, officers will be placed, charged with the duty of seeing that no persons pass to the Reading-room who are not provided with the necessary ticket of admission.